

FIG. 1A
 PRIOR ART

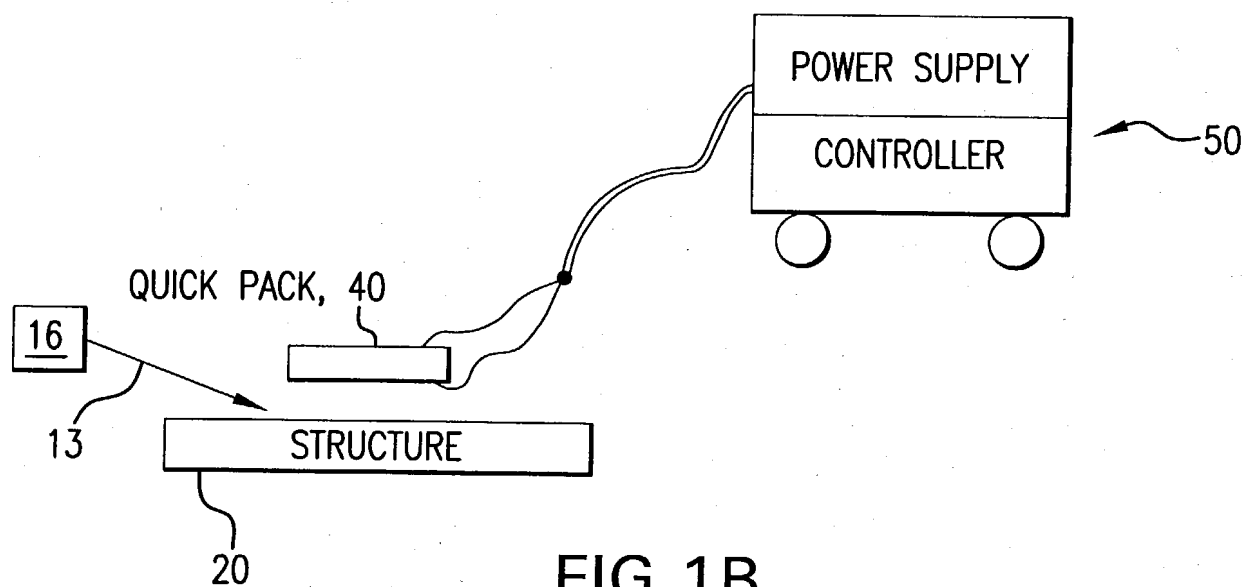


FIG. 1B

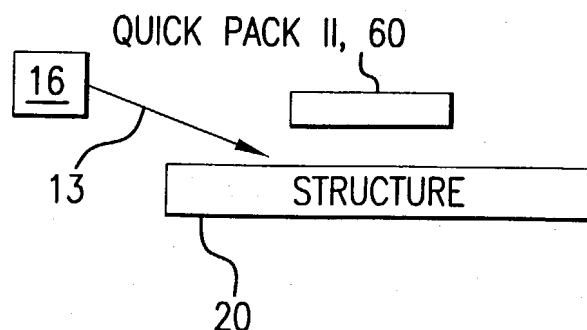


FIG. 1C

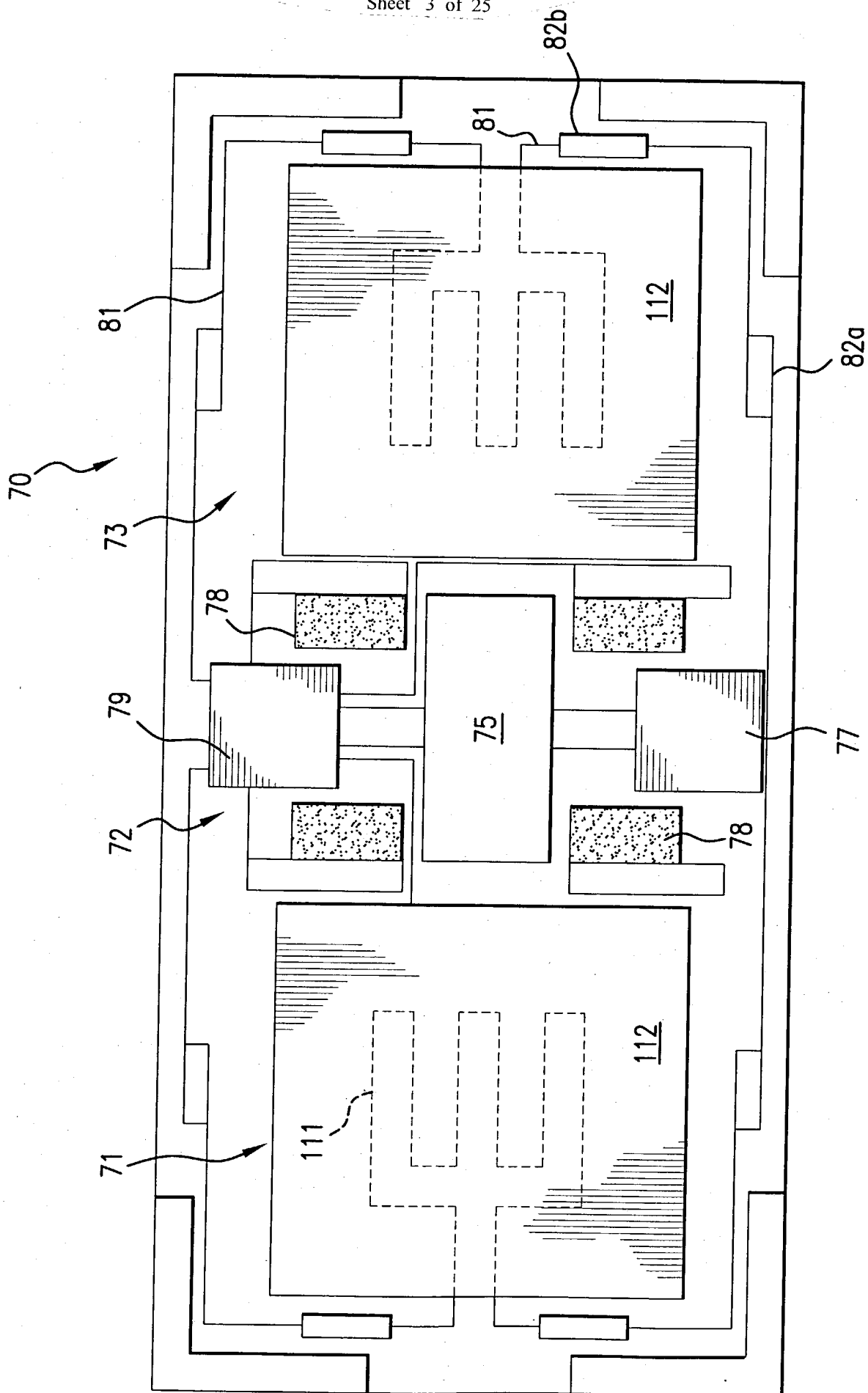


FIG. 2C

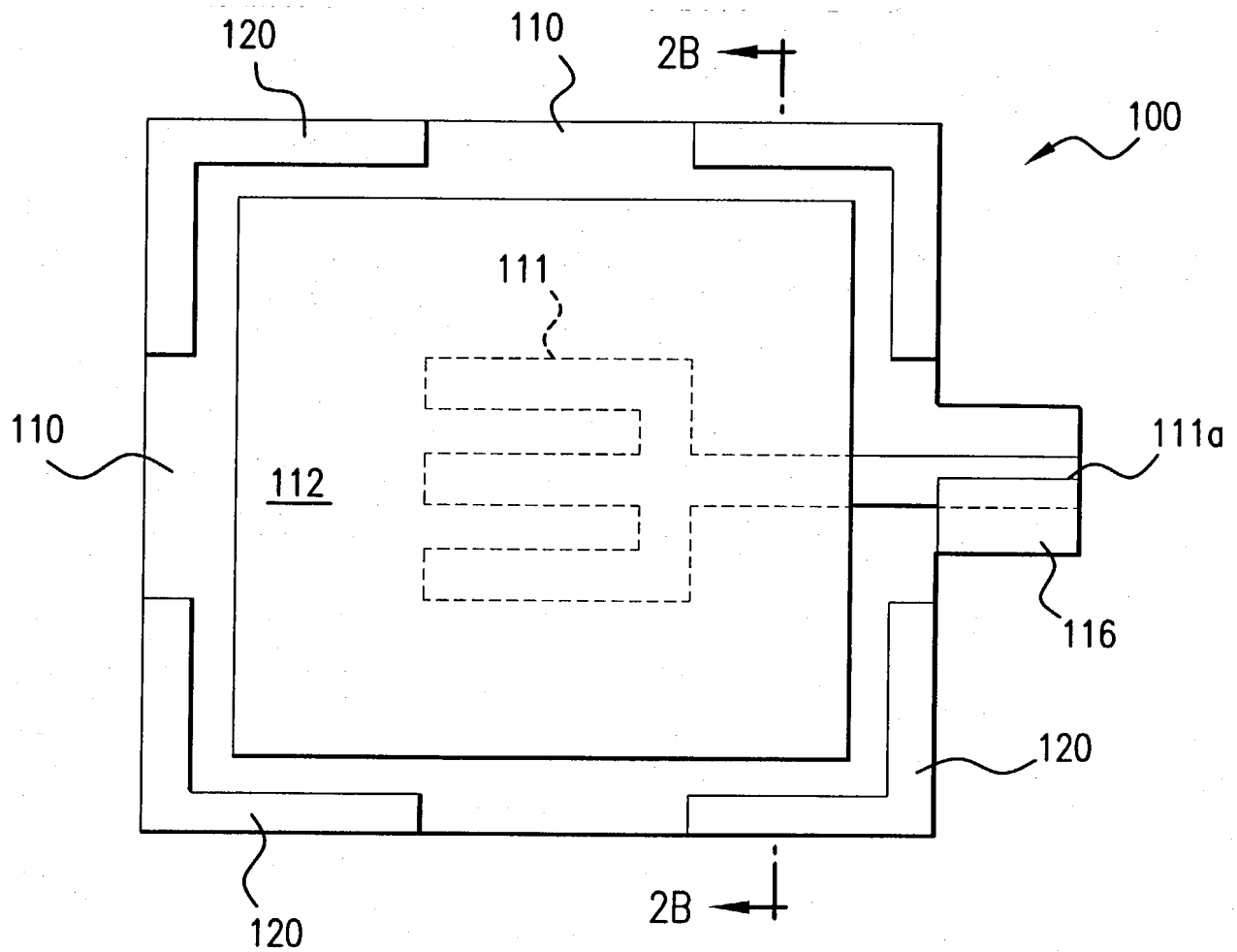


FIG. 2A

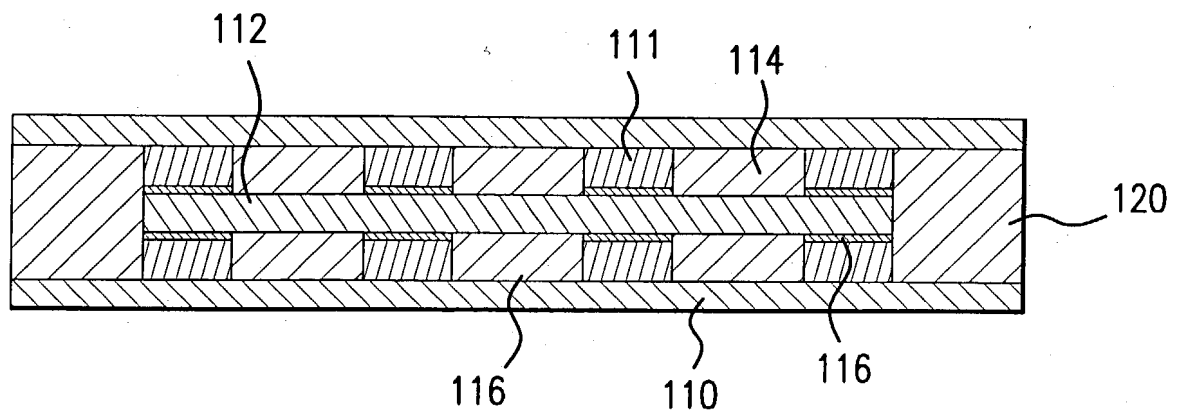


FIG. 2B

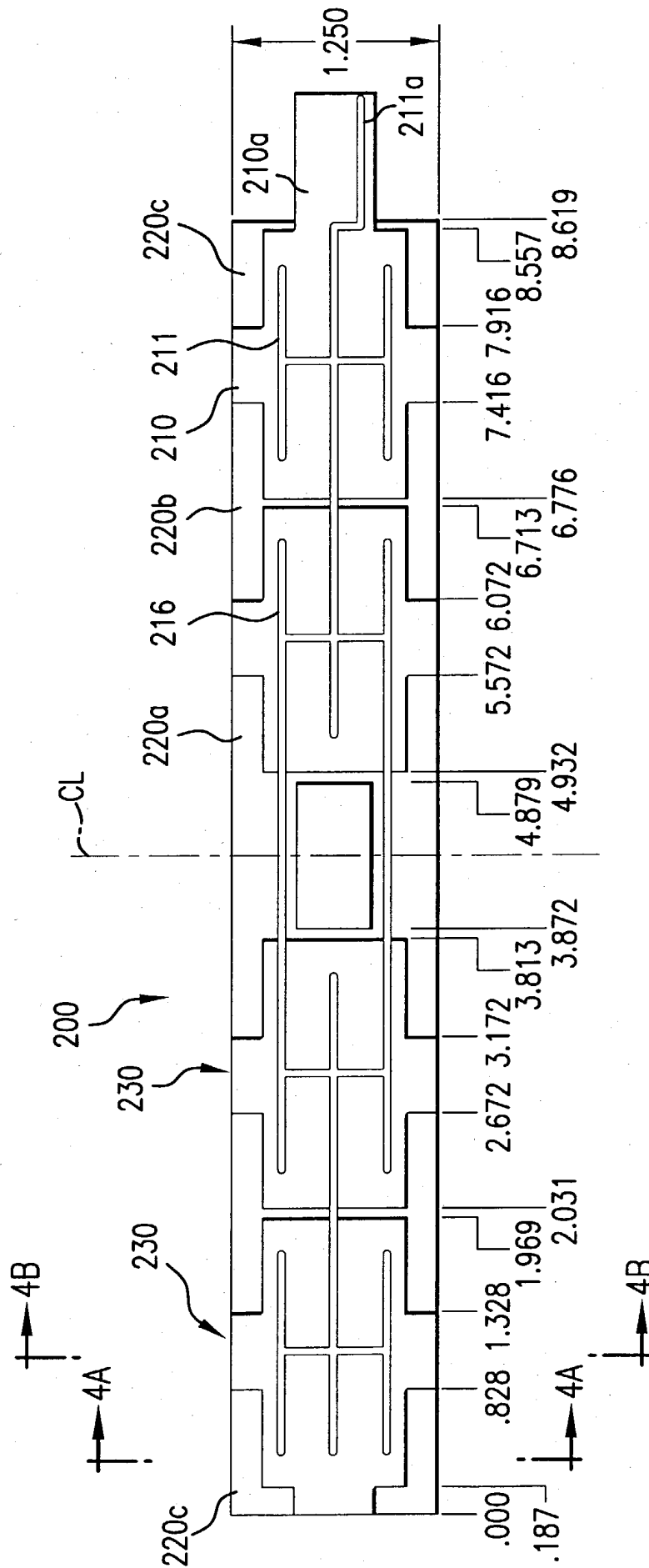
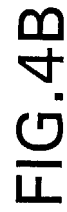
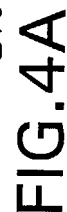
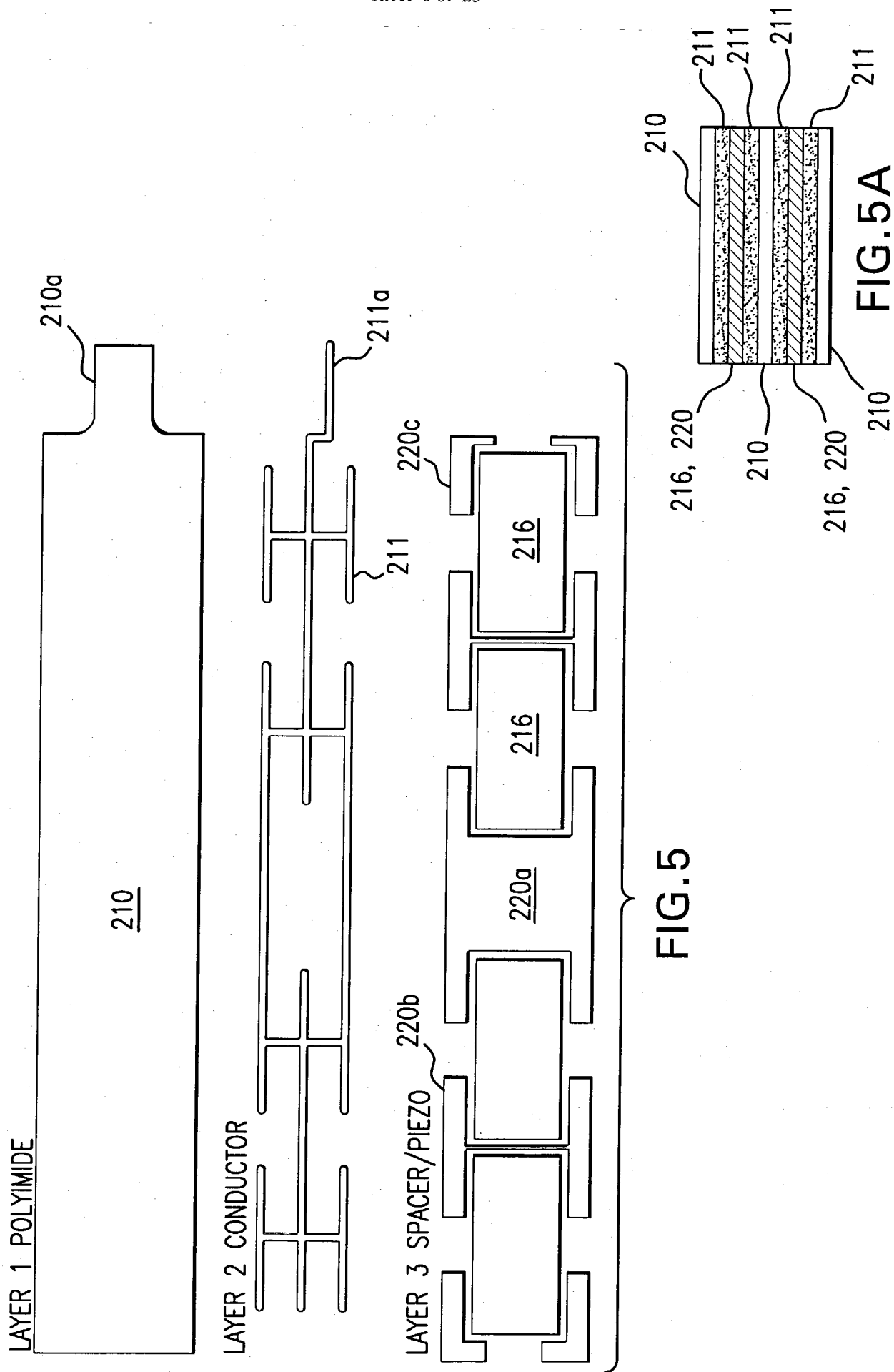


FIG. 3





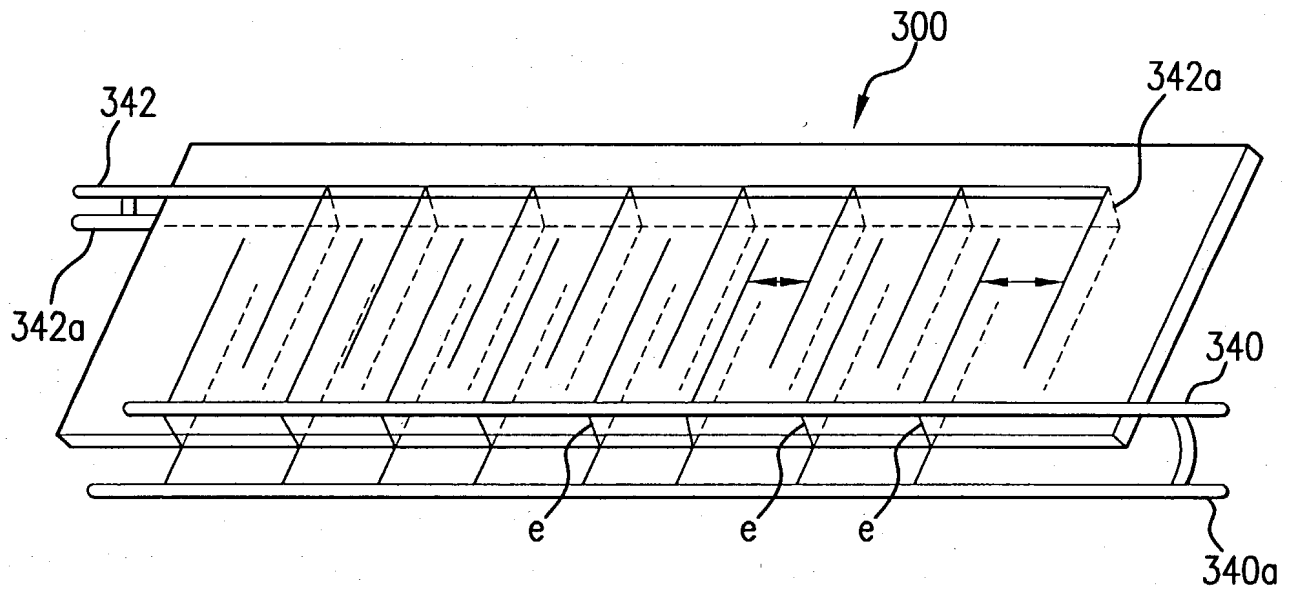


FIG. 6

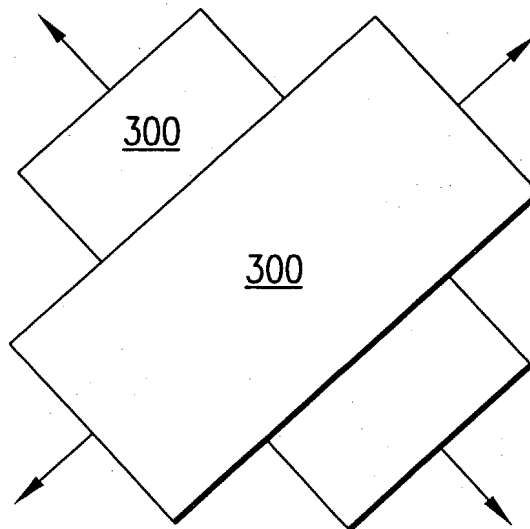


FIG. 7

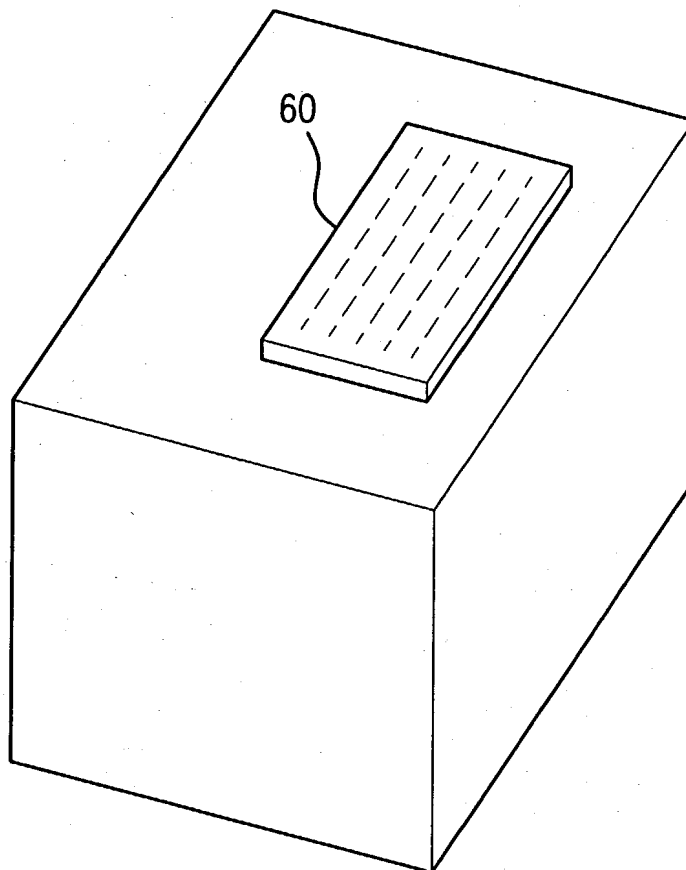


FIG. 8A

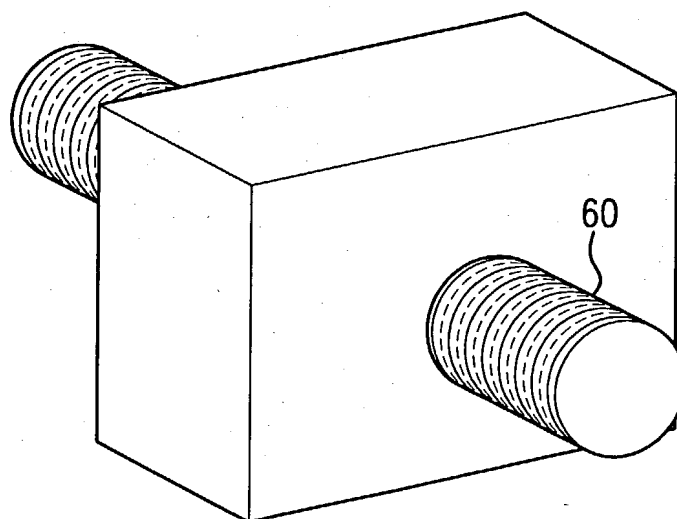


FIG. 8B

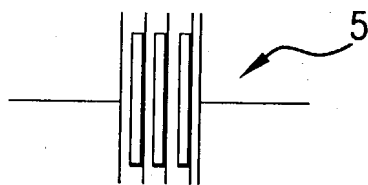


FIG. 9A

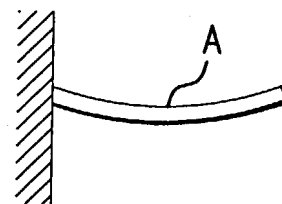


FIG. 9B



FIG. 9C

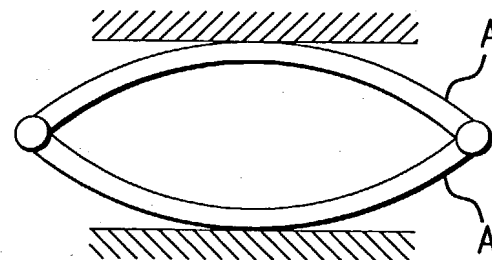


FIG. 9D

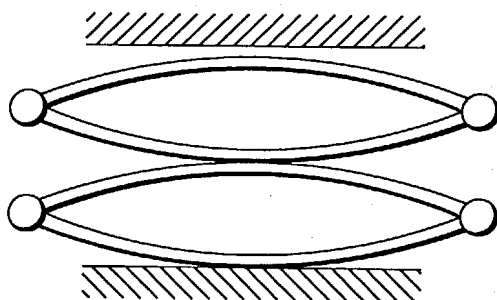


FIG. 9E

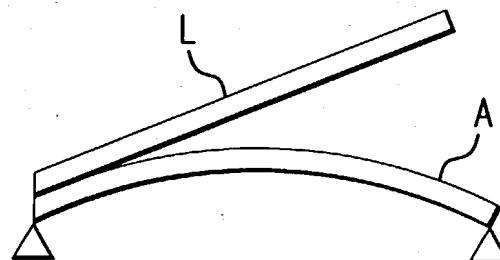


FIG. 9F

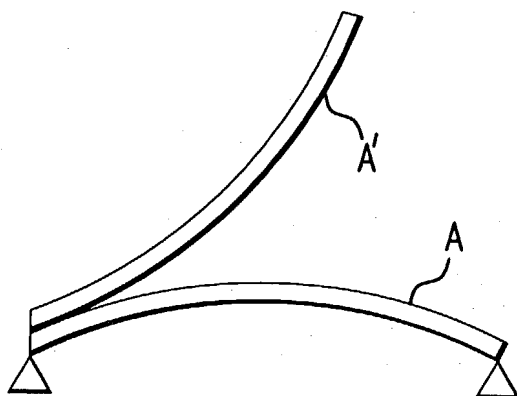


FIG. 9G

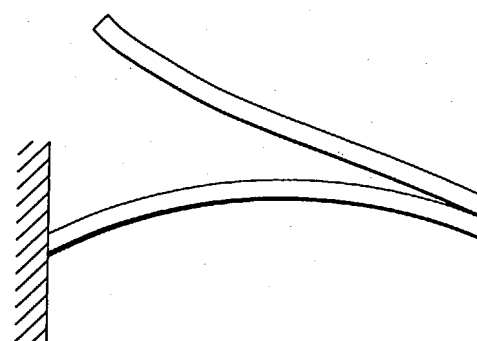
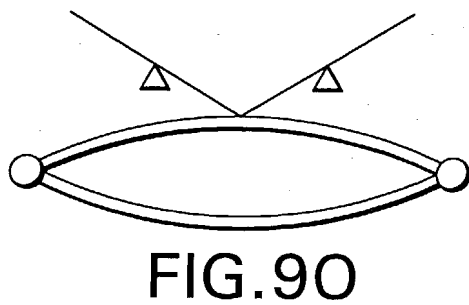
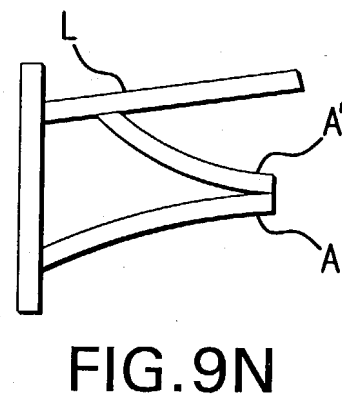
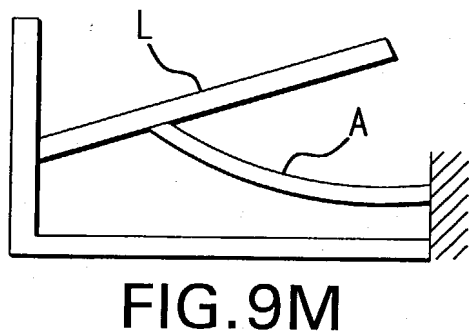
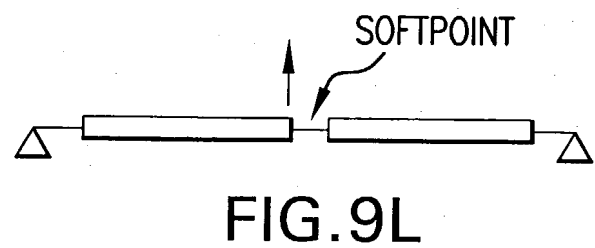
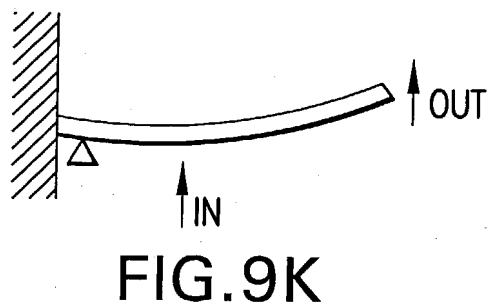
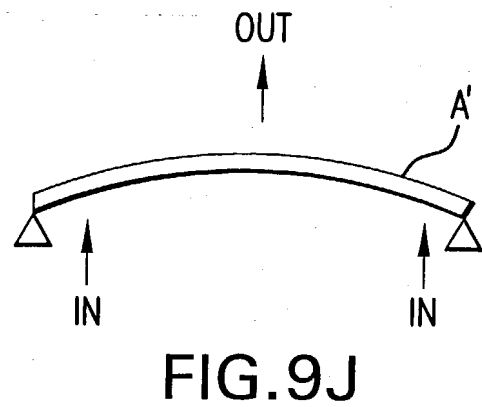
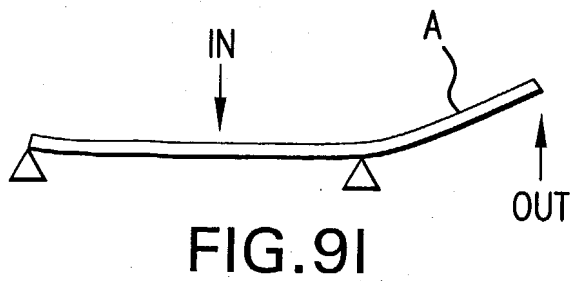


FIG. 9H



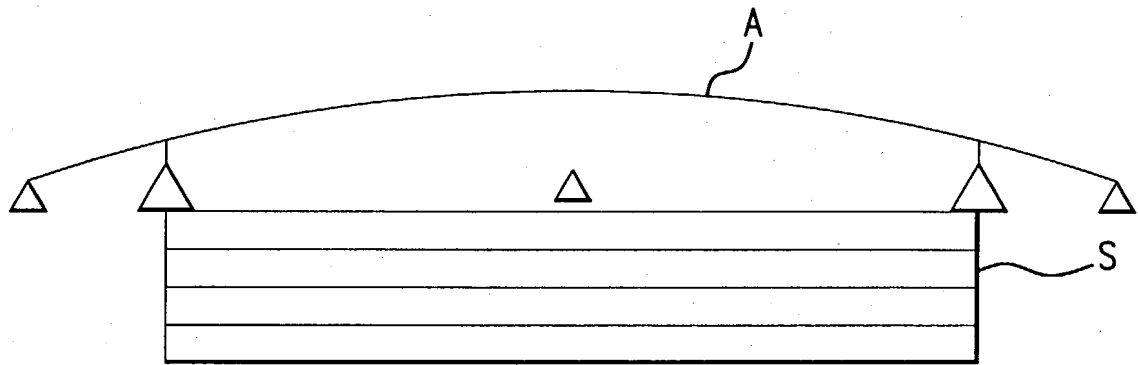


FIG. 9P

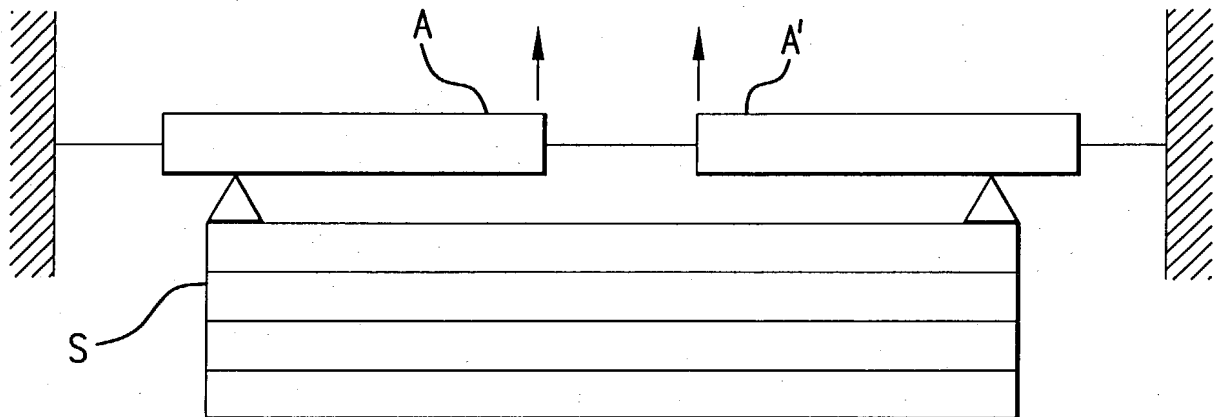


FIG. 9Q

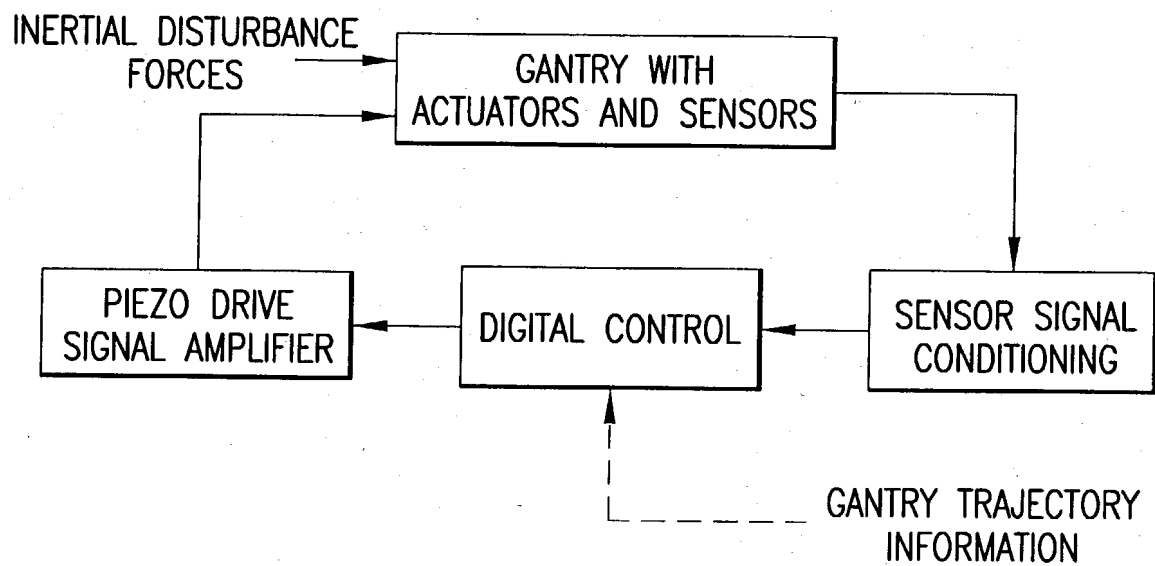


FIG. 10

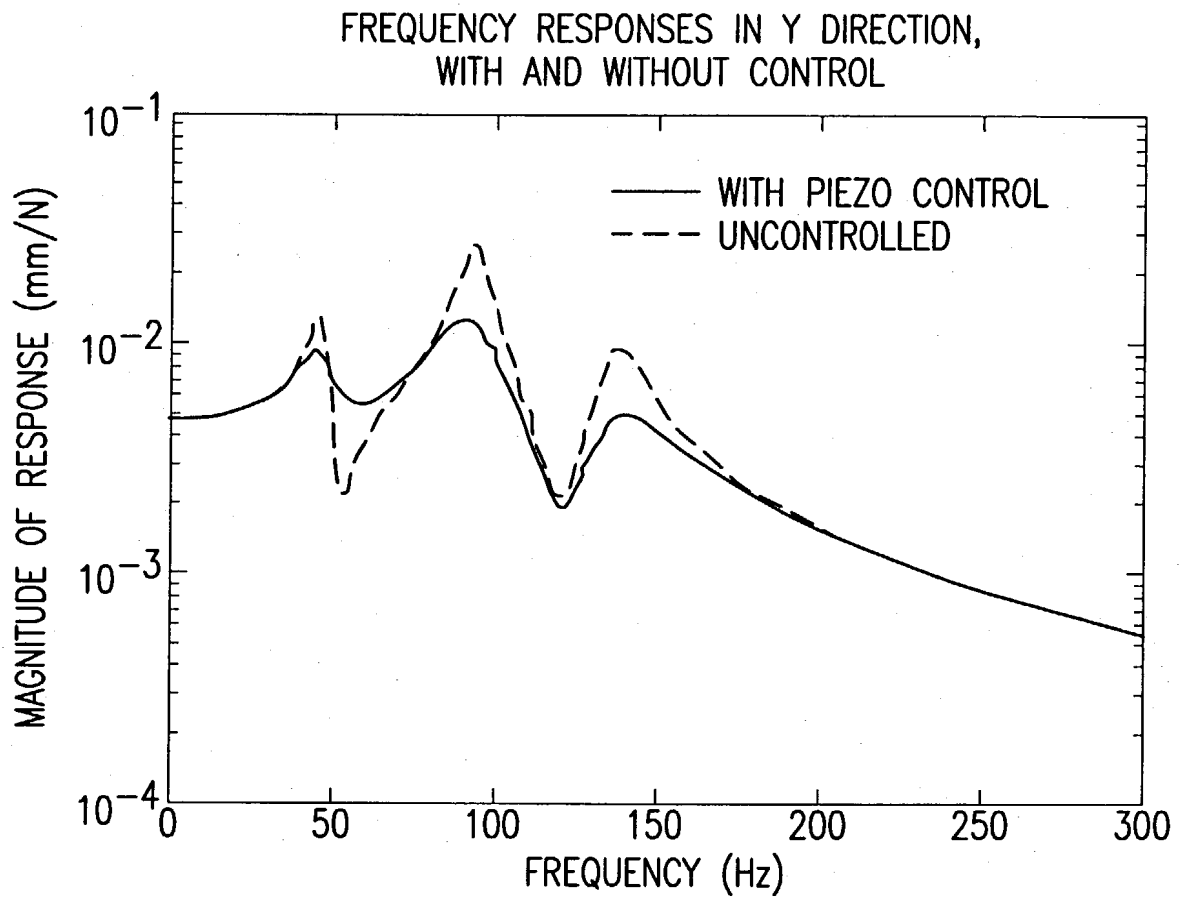


FIG.11

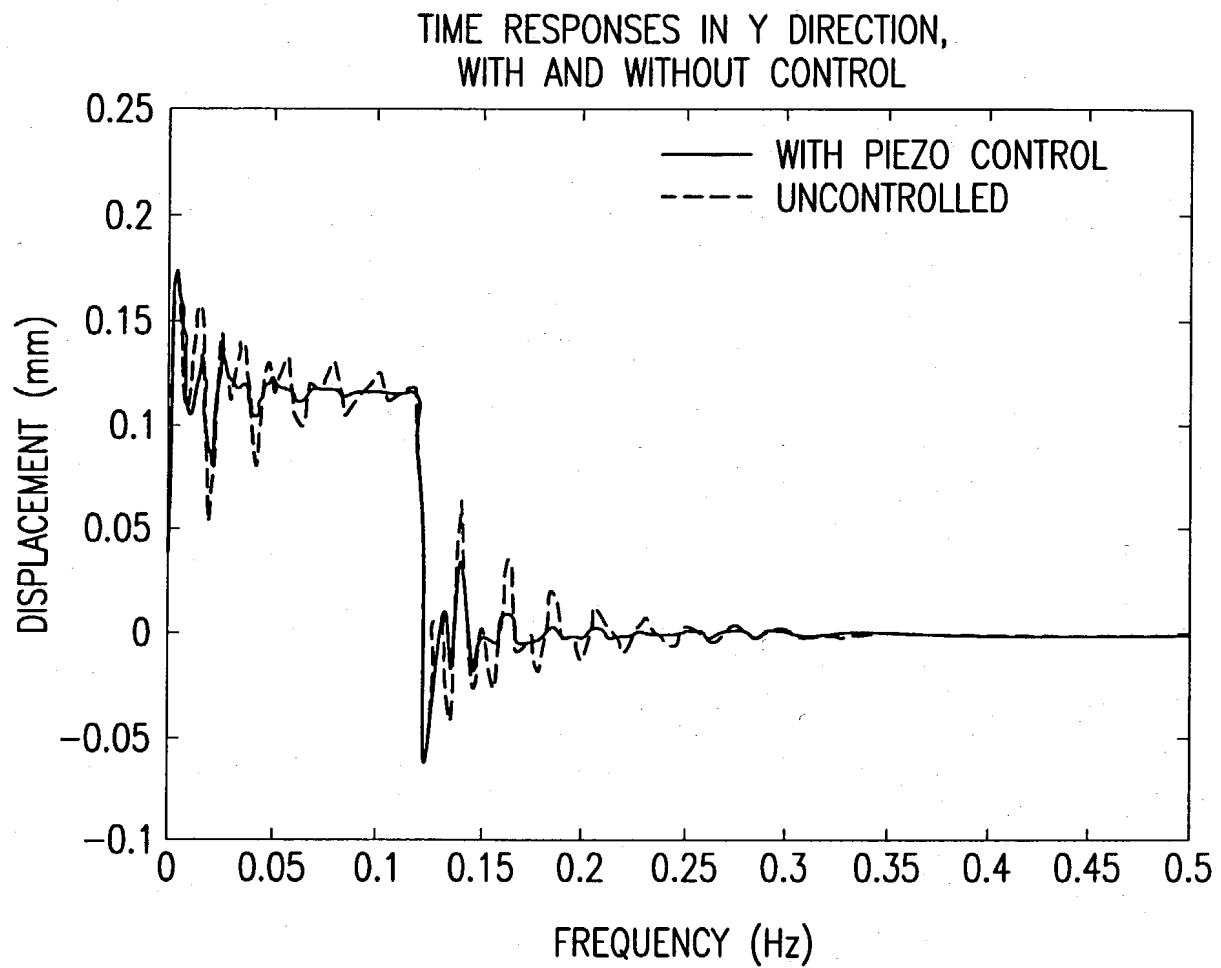


FIG.12

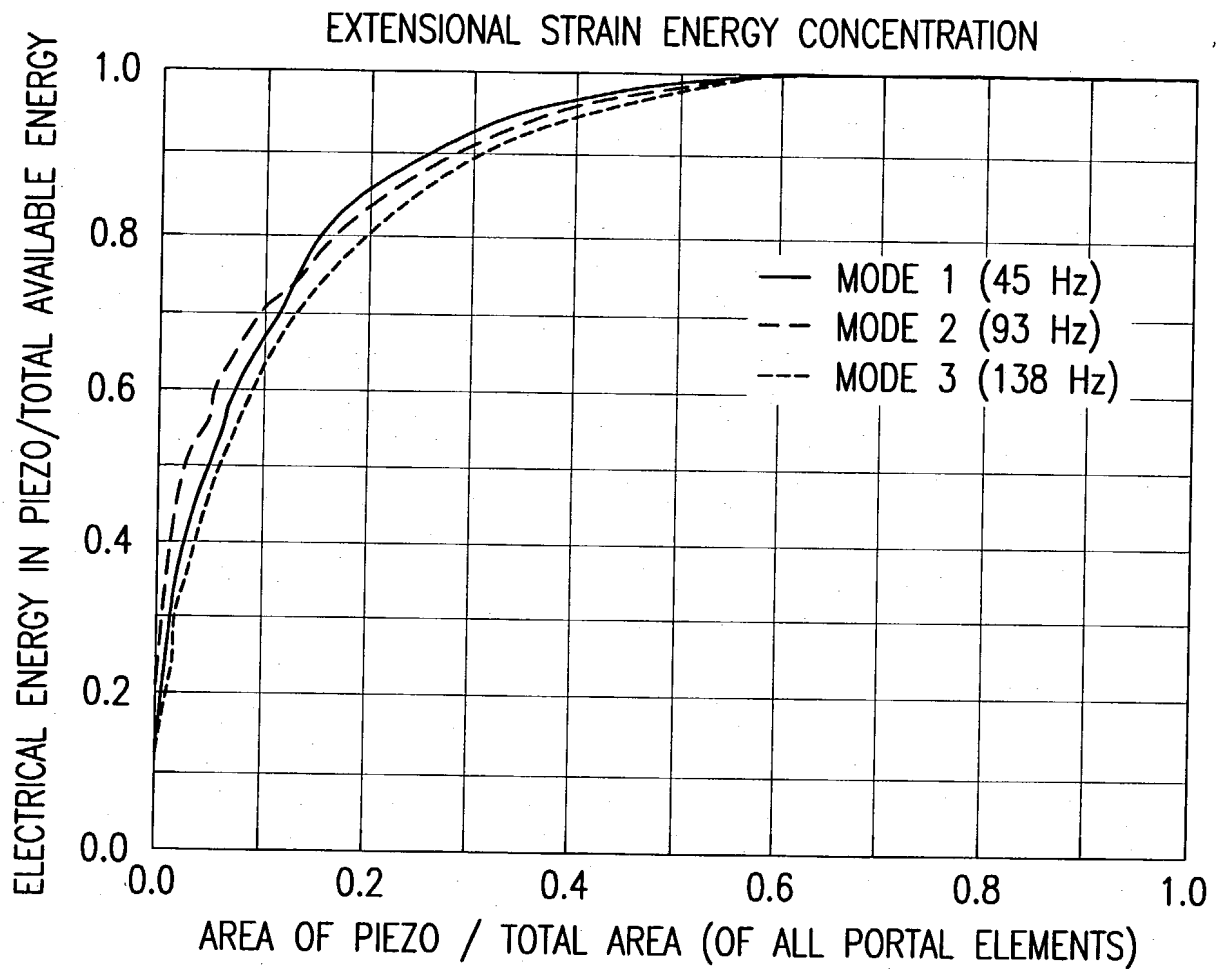


FIG.13

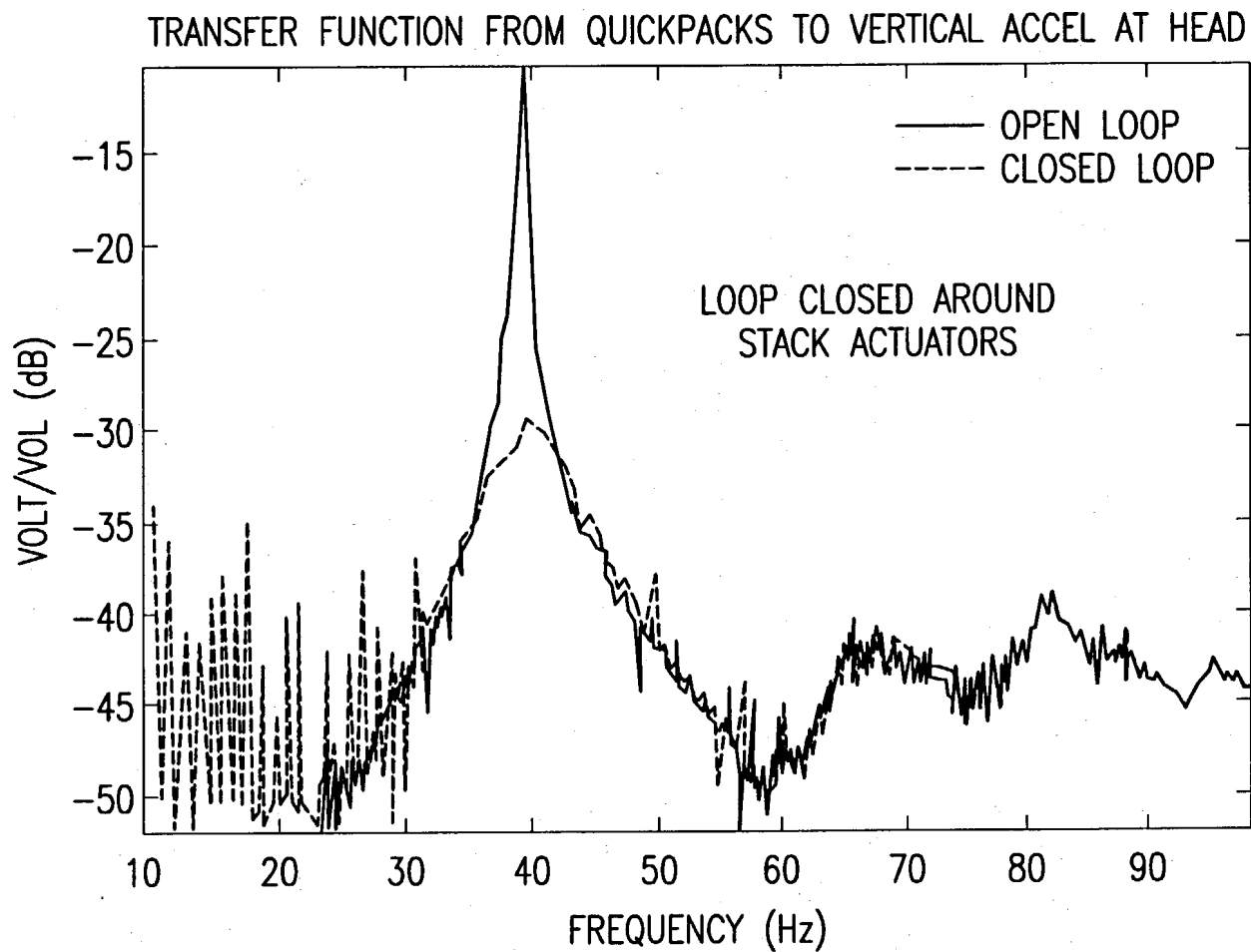


FIG.14

TRANSFER FUNCTION FROM QUICKPACKS TO VERTICAL ACCEL AT HEAD

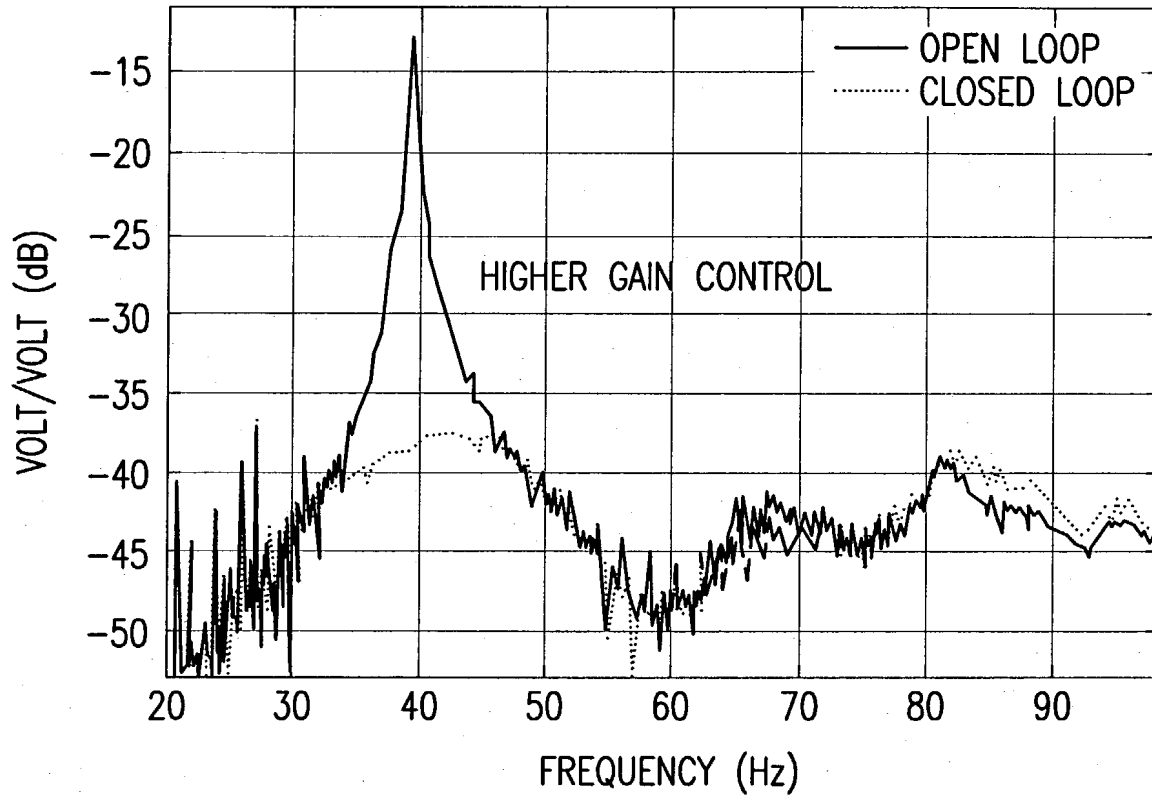


FIG.15

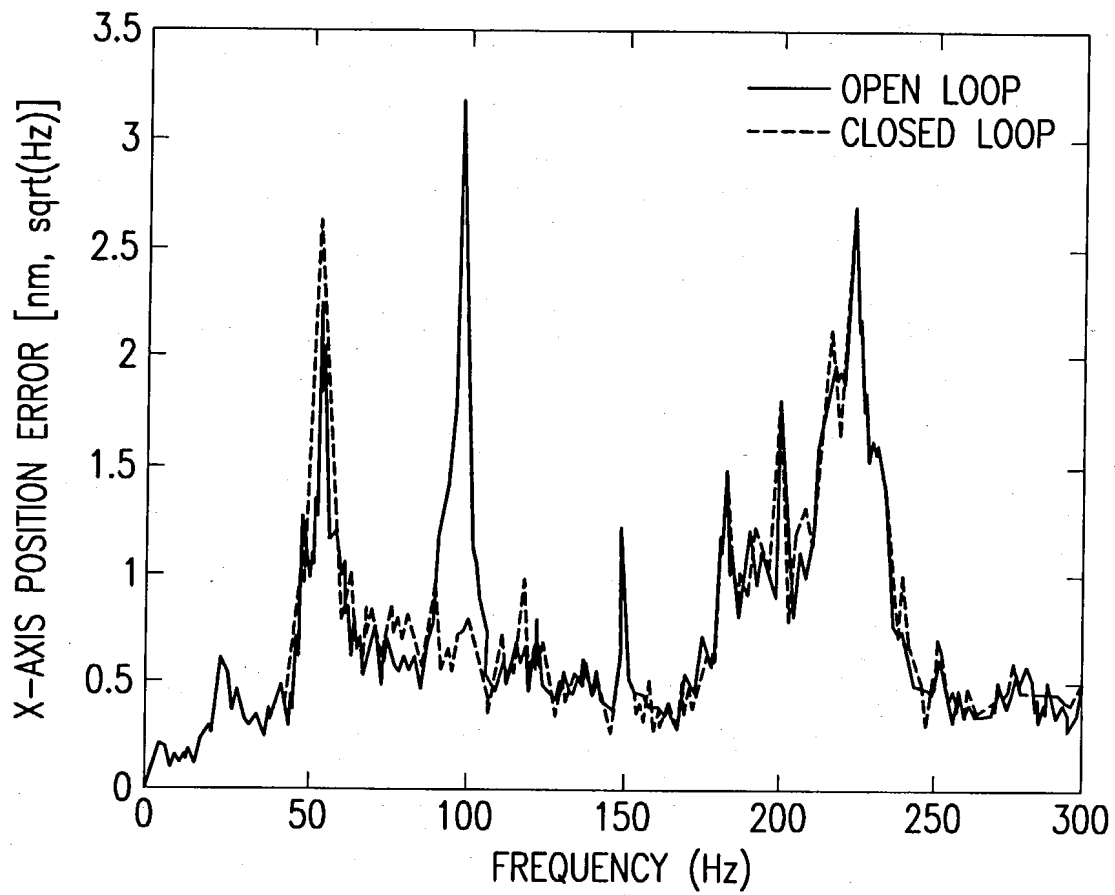


FIG.16

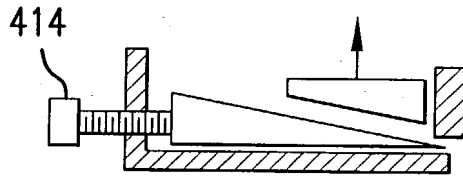


FIG. 17

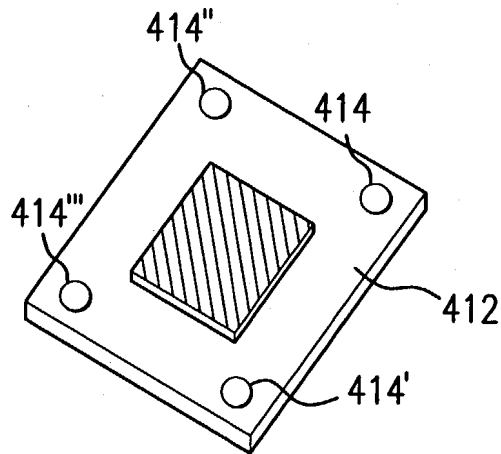


FIG. 18

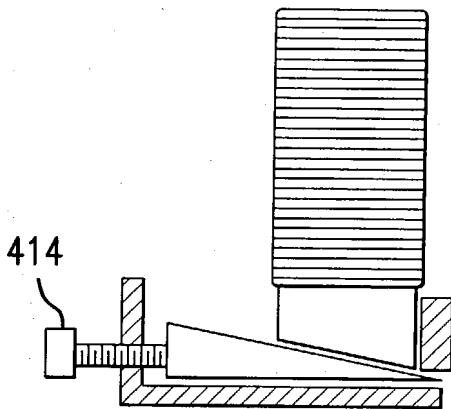


FIG. 19

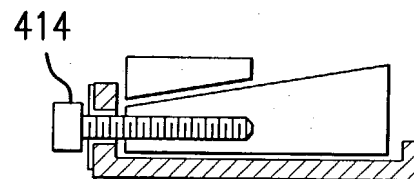
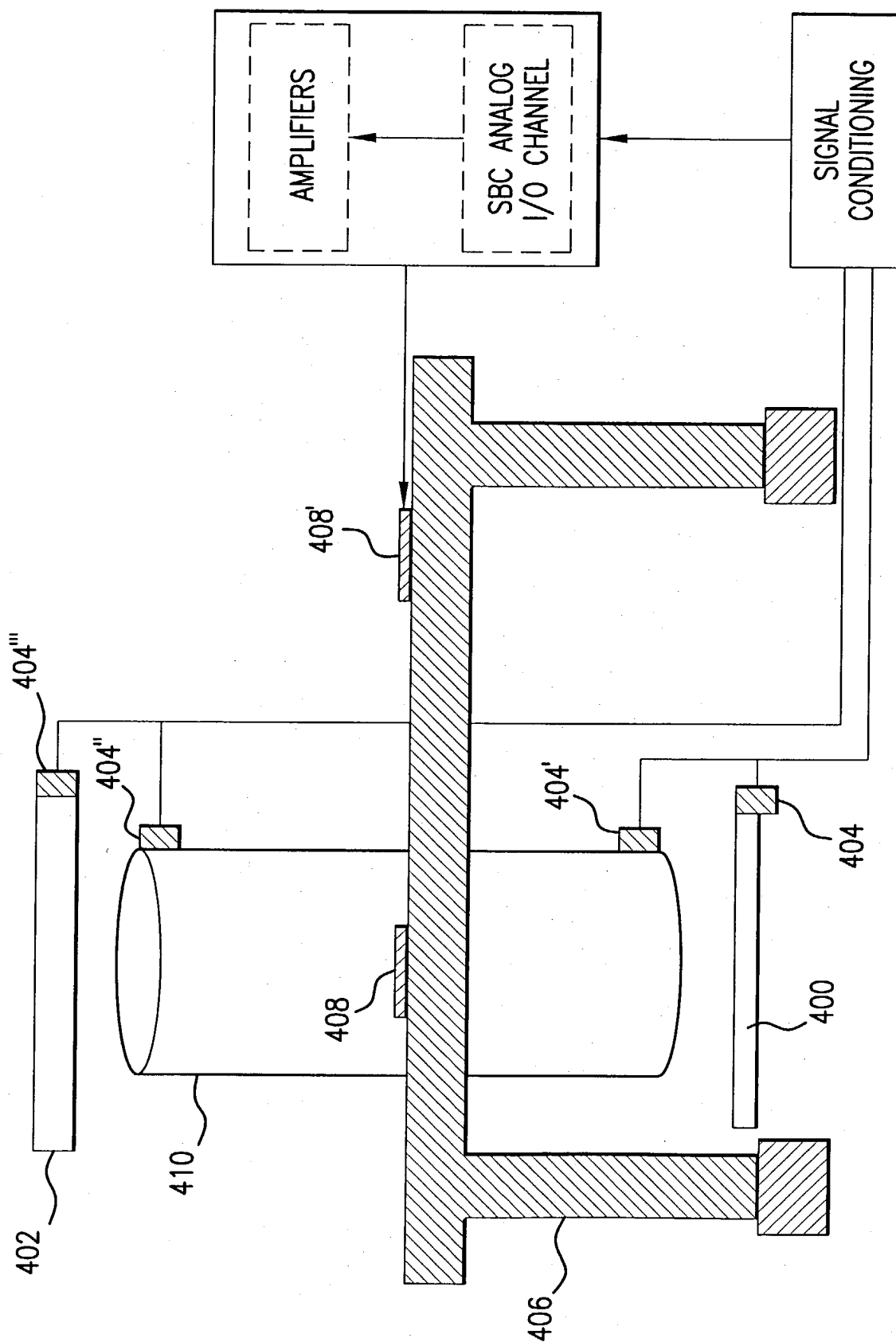
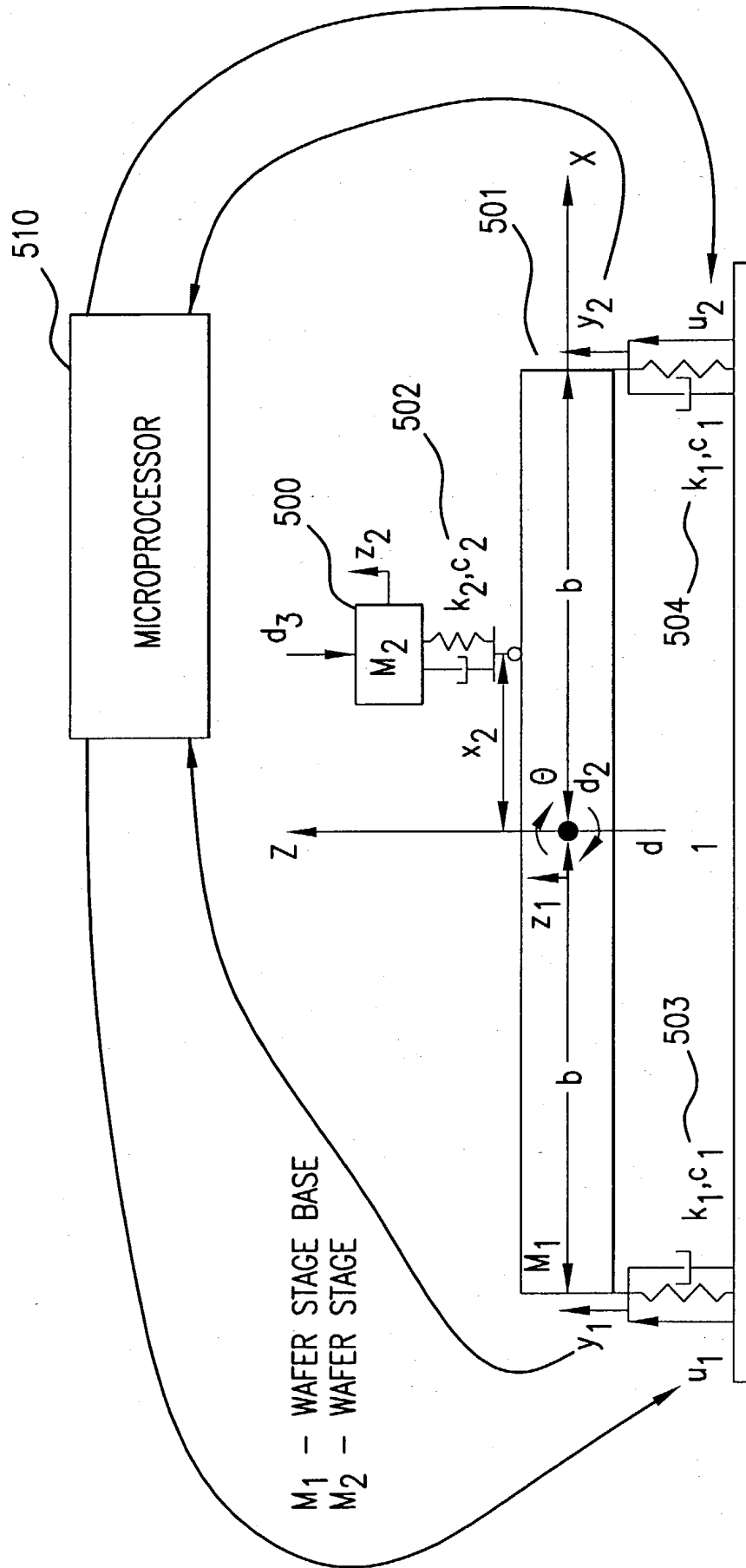


FIG. 20





- INPUTS (u_1): VOICE COIL FORCES ON BASE IN Z
- OUTPUTS (y_1): LASER DISPLACEMENT MEASUREMENTS COLLOCATED WITH VOICE COIL INPUTS
- DISTURBANCES (d_1): Z-FORCE AND θ MOMENT ON BASE, Z FORCE ON STAGE

FIG.22

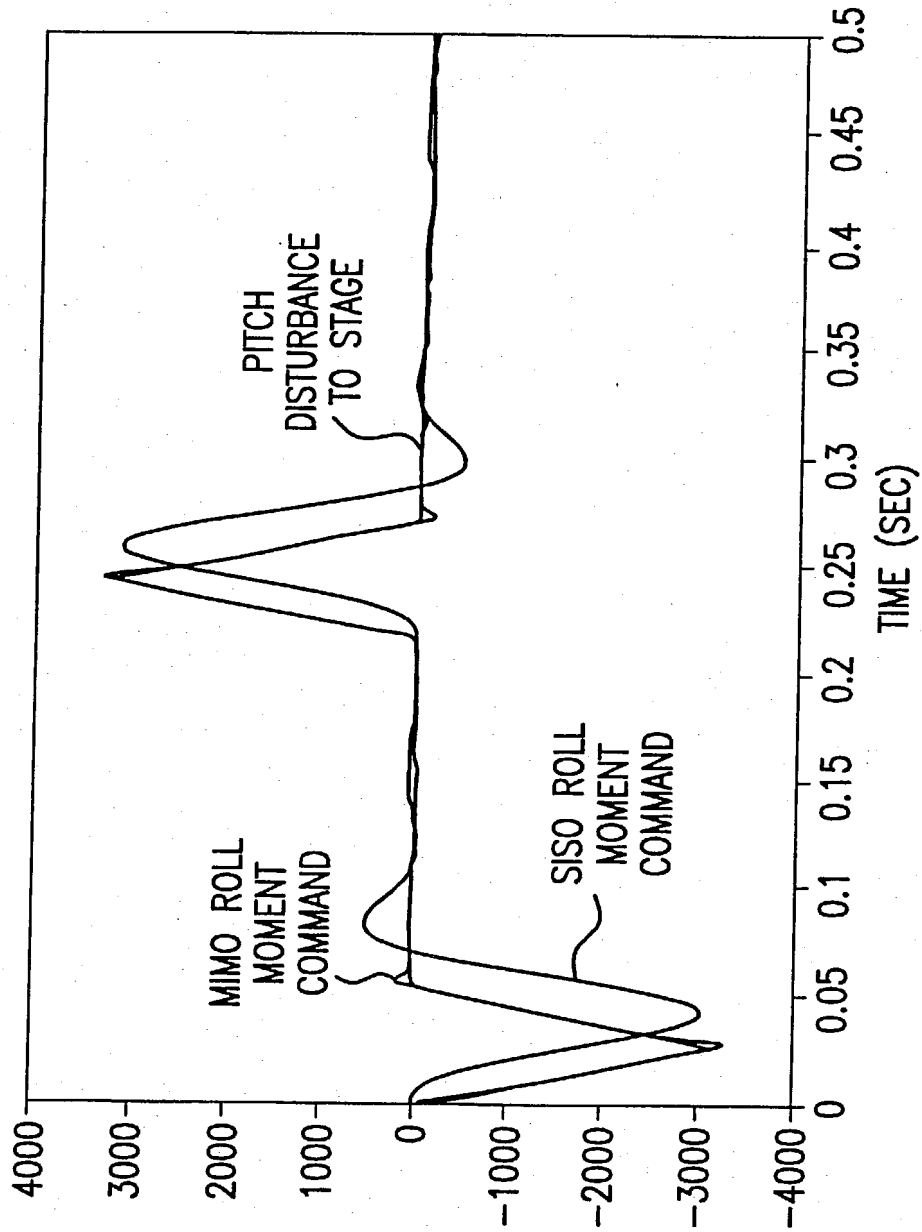


FIG.23

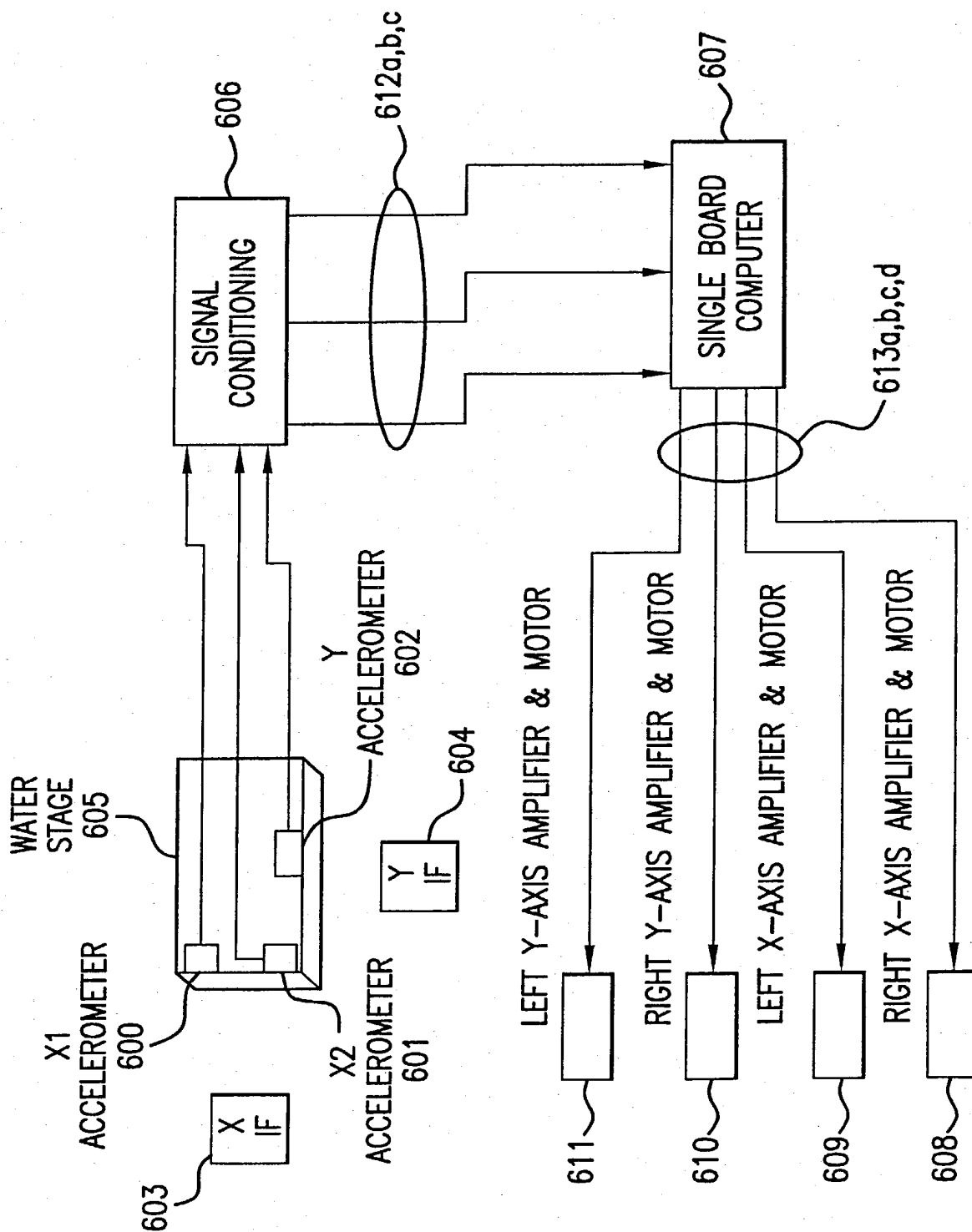


FIG. 24

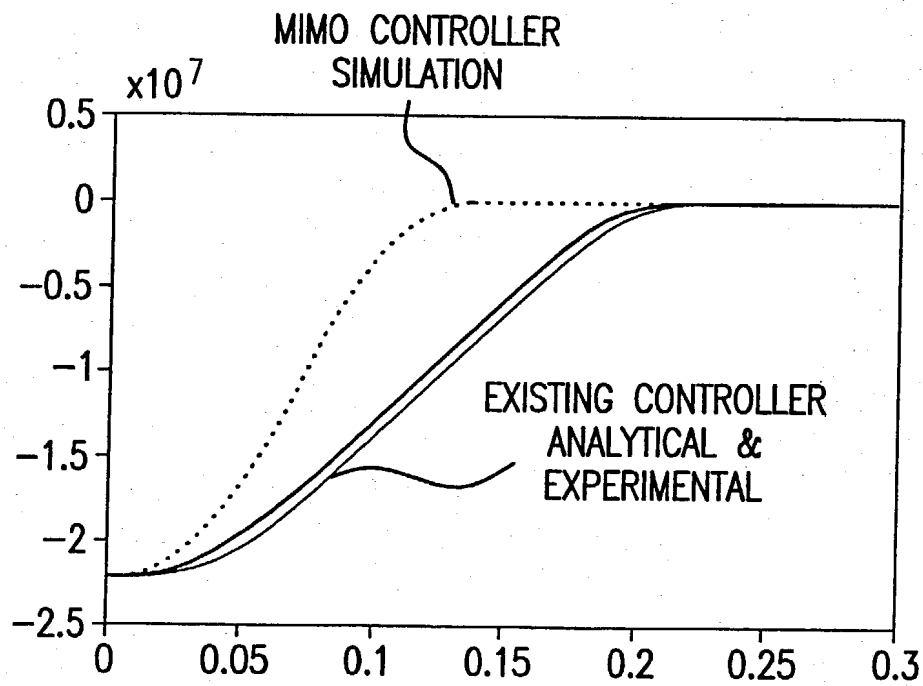


FIG. 25

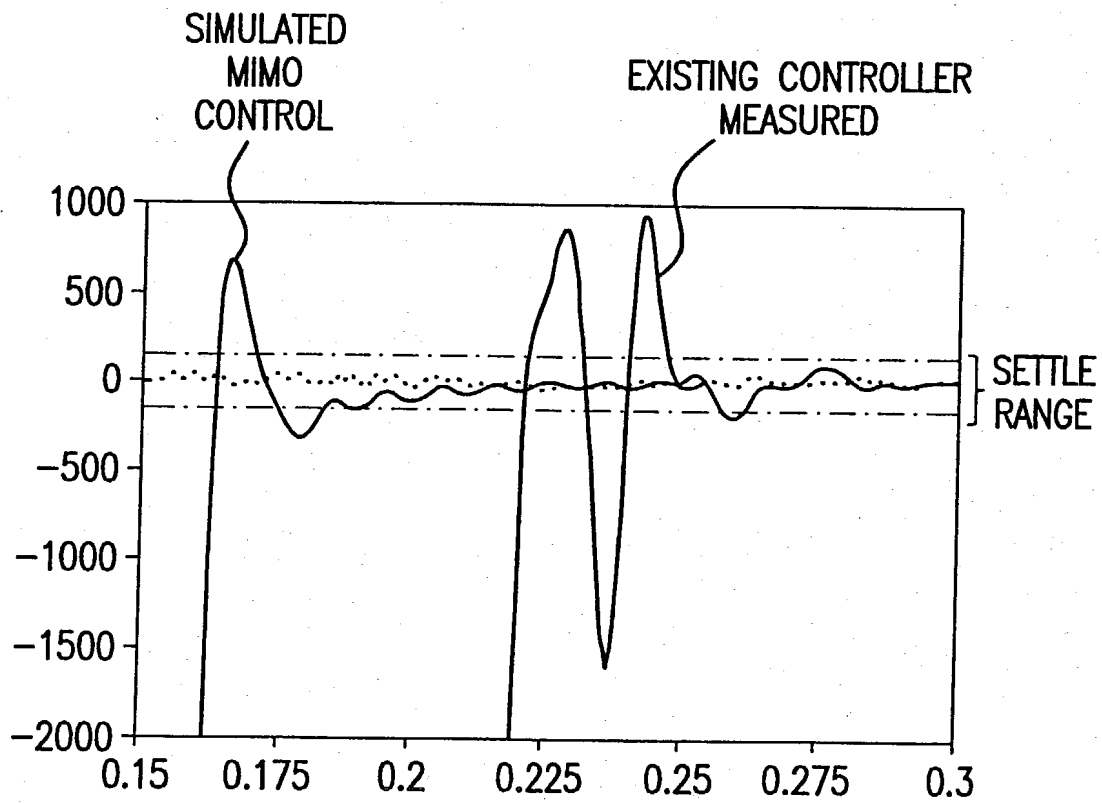


FIG.26